AMENDMENTS TO THE SPECIFICATION

Applicant respectfully requests that the paragraph beginning on page 7, line 8 be amended as follows:

Apparatus 10 includes a feeding stage or feeder 12 that handles blank samples prior to pretreatment and coating application performed in the later stages of apparatus 10. Apparatus 10 typically operates in conveyor form to process a plurality of substrate samples in a given hour. The rate of which the number of elements can pass through apparatus 10 is dependent upon the complexity of the treatment of the blanks prior to coating, the number of coats to be applied to the substrate after pretreatment, whether any cooling is necessary between coating stages, and what type of finishing operations are performed at the end. Feeder 12 can handle long lengths of stock in blank form and cut them to desired profiles prior to the pretreatment or additional coating stages later performed along apparatus 10. Further, manageable stock lengths ~~stock~~ may be fed via feeder 12 and then cut to finish size after the pretreatment and application of the coatings has been completed during the various stages along apparatus 10. Further still, the actual cutting of the stock to the desired lengths may be performed at any stage during the treatment of the stock whether ~~its~~ between a first or second coating stage or any other coating stage along apparatus 10. It is left to the skilled artisan to determine at what stage the stock should be cut to size, if necessary, prior to a particular coating operation step or finishing stage.

Applicant respectfully requests that the paragraph beginning on page 8, line 9 be amended as follows:

Next, the stock is fed through pretreatment stage 14. Pretreatment stage 14 actually can comprise several stages that are typically performed prior to coating the stock material. For

example, pretreatment stage 14 can include an apparatus that takes a blank stock and forms it into a desired shape, such as, for example, taking a wood, plastic or metal sample and milling it to a desired profile prior to the coating stages. Additionally, it is useful to clean the surface of the stock material prior to coating so that the coating material will adhere completely and without blemish upon the surface of the stock material. Furthermore, a preheating device can be included to heat at least the surface of the sample to match the temperature of the coating material and enhance the finish of the coating material as it cools. Thus, pretreatment stage 14 can also include cleaning stages that aid in cleaning the surface of the stock material passing through apparatus 10. The cleaning stages can include high pressure steam cleaning, high pressure air cleaning, solvent cleaning application, water bath cleaning, or other types of cleaning stages typically appropriate for the type of stock passing through apparatus 10. Since the type of stock passing through apparatus 10 can include, but is not limited to, wood surfaces, wood hybrid products, plastics, metals, fiberglass, and the like, an appropriate cleaning stage would then be applicable.

Applicant respectfully requests that the paragraph beginning on page 9, line 11 be amended as follows:

One or each stage 16-20 may include a heating element to heat the surface of the sample passing through just prior to the application of the coating material so the coating material does not cool too rapidly upon contact with the surface. This leads to a higher quality in the finish result. Further, graduated cooling stations may also be included after the coating is applied to prevent the coating from cooling too rapidly for delicate coating materials that require slower

cool down times. In alternative stations, where the coating material is insensitive to cooling conditions, a rapid cooling station may be added for greater ~~through put~~ throughput.

Applicant respectfully requests that the paragraph beginning on page 9, line 19 be amended as follows:

First stage 16 applies a first coat on the substrate surface passing through apparatus 10. In cases where there are slight blemishes and imperfections on the surface of the substrate, the thickness and uniformity of the coating being applied to the surface serves to fill in these imperfections and blemishes completely resulting in a uniform finish over the entire surface of the substrate. Figure 2 illustrates the surface of a substrate 26 material prior to (26A) and just after (26B) passing through first stage 16 and second stage 18. The portion prior to passing through first stage 16, substrate ~~26a~~ 26A, shows a plurality of blemishes and pock marks on the surface. Once the substrate passes through ~~first stage 16~~, the pock marks and blemishes are filled in by the coating material so as to achieve a uniform finish across the entire surface of the coated substrate as embodied in substrate ~~26b~~ 26B.

Applicant respectfully requests that the paragraph beginning on page 10, line 7 be amended as follows:

In the example shown in Figure 2, substrate 26 actually passes through two stages, first stage 16 and second stage 18. First stage 16 applies a first coat of material to the surface of the substrate while second stage 18 applies a second coat before the substrate exits and is supported by rollers 28. Rollers 28 also serve to transport substrate 26 from one stage to the next and are included where needed between stages or after final finish. Each roller 28 may be coated with a

non-stick, non-mar material, such as TEFLON®, to prevent the substrate to stick to it while the coating material is cooling or hardening.

Applicant respectfully requests that the paragraph beginning on page 10, line 19 be amended as follows:

In some applications, first stage 16 merely applies a primer coat that adheres more readily to the surface of the desired substrate than the subsequent coat(s), which are typically the color coat or finishing coats applied to the substrate. The thickness of the material applied to the surface of the substrate can be as thin as 0.001" to a thickness of 0.250" ± 0.001". If only a primer coat is applied to the substrate, then the substrate passes from the first stage to the second stage 18.

Applicant respectfully requests that the paragraph beginning on page 12, line 13 be amended as follows:

A coating apparatus ~~50~~, such as that of Figure 1 that uses first stage 16, second stage 18, or any of N stage 20, is illustrated in greater detail in Figure 3. Coating apparatus 50 includes a coating material chamber 52, a coating extruder 54, and a coating die 56. Coating chamber 52 attaches to coating die 56 so that the coating material may travel from the chamber to die 56 for application to the substrate as the substrate passes through die 56. A heater 58 connects to chamber 52 and to extruder 54 to heat the coating material to a fluid state. The coating apparatus 50 further includes a feeder assembly tray 60 and an exit roller stand 62, which comprises rollers 28 of Figure 2. The feeder assembly tray 60 feeds stock to be processed and coated during operation. Exit roller stand 62 receives stock 26 after passing through stage 56.

Feeder assembly tray 60 further includes a stock delivery system 64, which can be a belt loop pressed against the substrate 26 to control the delivery rate of the substrate through ~~stage~~ coating die 56.

Applicant respectfully requests that the paragraph beginning on page 14, line 4 be amended as follows:

The material placed within chamber 52 is heated by heater 58 to a liquified or fluid temperature state that allows the mixture to flow either via a pump or gravity fed via extruder 54. As the coating material now is in a liquid or fluid state, it travels to the cavity formed within coating ~~device~~ die 56 until it surrounds the perimeter of the aperture in the coating die. Once a sufficient amount of coating material collects within the cavity and along the perimeter of the aperture, the coating material is ready to be applied to the substrate as the substrate passes through die 56.

Applicant respectfully requests that the paragraph beginning on page 15, line 18 be amended as follows:

Figure 4 illustrates a perspective view of coating die 56 when split open to show the interior construction. Coating die 56 ~~typically~~ comprises two portions: a first ~~die~~ shell portion 70 and a second ~~die~~ shell portion 72. The first ~~die~~ shell portion 70 includes a cavity 74 formed within a first face 76 around the perimeter of the aperture ~~71~~ 73 through which the substrate passes. Cavity 74 provides a collecting cavity for the coating material as it transports from coating chamber 52 to die 56. Second ~~die~~ shell portion 72 typically includes a substantially planar face 78, which meets with the cavity 74 and face 76 of ~~die~~ shell portion ~~72~~ 70 in such a

relation that ~~the~~ aperture 73 of die ~~58~~ 56 matches with a similar, but mirror-shaped aperture ~~73~~ 71 found in second ~~die face~~ shell portion ~~78~~ 72. As shown in Figure 6, along the inner perimeter of ~~the~~ aperture 73 formed in ~~die~~ shell ~~72~~ 70, is a receiving channel 80 in which the coating material further collects to allow the substrate to pass through the coating material and apply the coating material to the surface of the substrate during the coating step. Channel 80 may either have an interior radius R, a slant at a given angle, such as 45 degrees or any other desirable angle, or have a substantially square or rectangular shape. The requirement is that the channel formed around the perimeter be sufficient enough for the coating material to collect in sufficient quantity so as to apply a uniform amount of coating material around all the dimensions of the substrate.

Applicant respectfully requests that the paragraph beginning on page 16, line 13 be amended as follows:

Figure 5 illustrates a perspective view of die 56 where the substrate exits after coating. Figure 6 illustrates a perspective cut-away view of the opposite, interior side of ~~die 56~~ shell portion 70 where the substrate moves in the direction of the arrows. Notice how the profile of ~~the~~ aperture 73 of die 56 matches that of the substrate 84 shown in cross-sectional form in Figure 7.

Applicant respectfully requests that the paragraph beginning on page 16, line 18 be amended as follows:

In another alternative embodiment, selected portions of the die aperture may be blocked off. Figure 8 illustrates various configurations of how the ~~damn~~ dam may be implemented. In

Figure 8A, the entire outer surface of substrate 86 is coated with a uniform finish. Further, should only 3 sides of a 4-sided perimeter of the substrate be coated, as shown in Figure 8B, the fourth side can be blocked so that no coating material is applied to that surface. Further, should the user only want paint applied to a single surface, then the remaining sides can be blocked. This is also helpful when more than one color scheme is desired. Accordingly, several stages can be utilized, each stage being blocked so that only a single application in a give location is made, which application does not overlap with the other color application to apply either 2-tone or other multiple-tone color schemes. Figure 8C illustrates a multi-colored scheme of coating material applied to substrate 86. Figure 8D shows multiple color coatings on different portions of the substrate as well as bare portions that were blocked during each coating stage.

Applicant respectfully requests that the paragraph beginning on page 18, line 12 be amended as follows:

Yet another embodiment of the coating apparatus according to the instant invention and shown in Figure 11 utilizes a gravity fed coating chamber or vat that allows for stock items to be coated to be dropped and drawn through the coating material, then finished by passing through the coating die 56 in a substantially vertical direction. The coating material can be maintained viscous enough that the aperture prevents the material from flowing out of the die 56, yet still achieving a quality finish on the product. ~~The finish results approach those of the~~

Applicant respectfully requests that the paragraph beginning on page 19, line 3 be amended as follows:

The substrate or product intended to be coated can be any ~~study~~ object including metal, metal-type objects, wood, wood-based products, medium-density fiberboard (MFB) synthetic substrates such as plastics, glass, glass-based products, and anything else that is substantially rigid so that its shape is maintained as it passes through the die.